



The Metropolitan District

water supply · environmental services · geographic information

**STRATEGIC PLANNING COMMITTEE
SPECIAL MEETING
WEDNESDAY, APRIL 5, 2023
4:00 PM**

Location

Board Room
District Headquarters
555 Main Street, Hartford

Dial In #: (415)-655-0001

Access Code: 43808661#

[Meeting Video Link](#)

Commissioners:

Adil	Healy
Anderson	Hoffman
Avedisian (C)	Lester
Bazzano	Mandyck
Bush	Pane
Currey	Petoskey
Desai	Salemi
DiBella (Ex-Officio)	Taylor
Gale	Torres
Gentile	Woulfe

Quorum: 10

1. CALL TO ORDER
2. PUBLIC COMMENTS RELATIVE TO AGENDA ITEMS
3. APPROVAL OF MEETING MINUTES OF MARCH 21, 2023
4. REPORT RE: 2003 BARRINGTON WELLES MANAGEMENT STUDY UPDATE - FINANCE, PROCUREMENT AND CUSTOMER SERVICE
5. OPPORTUNITY FOR GENERAL PUBLIC COMMENTS
6. ADJOURNMENT

**STRATEGIC PLANNING COMMITTEE
SPECIAL MEETING
The Metropolitan District
March 21, 2023**

PRESENT: Commissioners John Avedisian, Richard Bush, Donald Currey, John Gale, Joan Gentile, Allen Hoffman, Jacqueline Mandyck, Alvin Taylor, and District Chairman William A. DiBella (9)

REMOTE ATTENDANCE: Commissioners Andrew Adil, Byron Lester and Dominic M. Pane (3)

ABSENT: Commissioners Kyle Anderson, John Bazzano, Dimple Desai, James Healy, Jon Petoskey, Pasquale Salemi, Calixto Torres and James Woulfe (8)

ALSO PRESENT: Commissioner Jean Holloway
Commissioner Bhupen Patel (Remote Attendance)
Scott W. Jellison, Chief Executive Officer
John S. Mirtle, District Clerk
Christopher Levesque, Chief Operating Officer
Kelly Shane, Chief Administrative Officer
Susan Negrelli, Director of Engineering
Robert Schwarm, Director of Information Technology
David Rutty, Director of Operations
Tom Tyler, Director of Facilities
Jamie Harlow, Director of Human Resources
Hank Martin, District Patrol Commander
Lisa Madison, Manager of Procurement
Robert Rostkowski, Water Pollution Control Laboratory Administrator
Andrew Hubbard, Natural Resources Administrator
Raymond Baral, Assistant Manager of Water Treatment
Scott LaRose, Senior Electronics Technician
Chris Parisan, Water Treatment Plant Superintendent
Carl Desaulnier, Senior Water Supply Maintenance Supervisor
Trevor Roberts, Water Treatment Plant Operations Supervisor
Alison Miner, Water Treatment Plant Operations Supervisor
Tim Anthony, Hydro Plant Supervisor
Mary Manning, Project Manager (Remote Attendance)
Dinesh Patel, Construction Manager (Remote Attendance)
Griselda Rodriguez, Senior Administrative Analyst (Remote Attendance)
Nick Salemi, Communications Administrator
Carrie Blardo, Assistant to Chief Executive Officer
Julie Price, Executive Assistant
David Baker, IT Consultant (Remote Attendance)

CALL TO ORDER

Chairperson Avedisian called the meeting to order at 4:00 PM

NO QUORUM PRESENT

District Clerk John S. Mirtle called the roll and declared that a quorum of Strategic Planning Committee was not present.

PUBLIC COMMENTS RELATIVE TO AGENDA ITEMS

No one from the public appeared to be heard.

APPROVAL OF MINUTES OF MARCH 8, 2023

The approval of meeting minutes was postponed due to lack of quorum.

Commissioner Adil entered the meeting virtually at 4:03 PM

**2003 BARRINGTON WELLES MANAGEMENT STUDY UPDATE
WATER SUPPLY, LABORATORY SERVICES AND PATROL**

Tom Tyler, Director of Facilities, and Andrew Hubbard, Natural Resources Administrator, provided a presentation on Watershed Protection. Raymond Baral, Assistant Manager of Water Treatment, presented on water supply and treatment, including a demonstration of the SCADA System. Robert Rostkowski, Water Pollution Control Laboratory Administrator, gave a presentation on the water quality laboratory.

Commissioner Gale entered the meeting at 4:16 PM

METROPOLITAN DISTRICT COMMISSION
2003 MANAGEMENT STUDY ANALYSIS



Strategic Planning Committee
March 21, 2023

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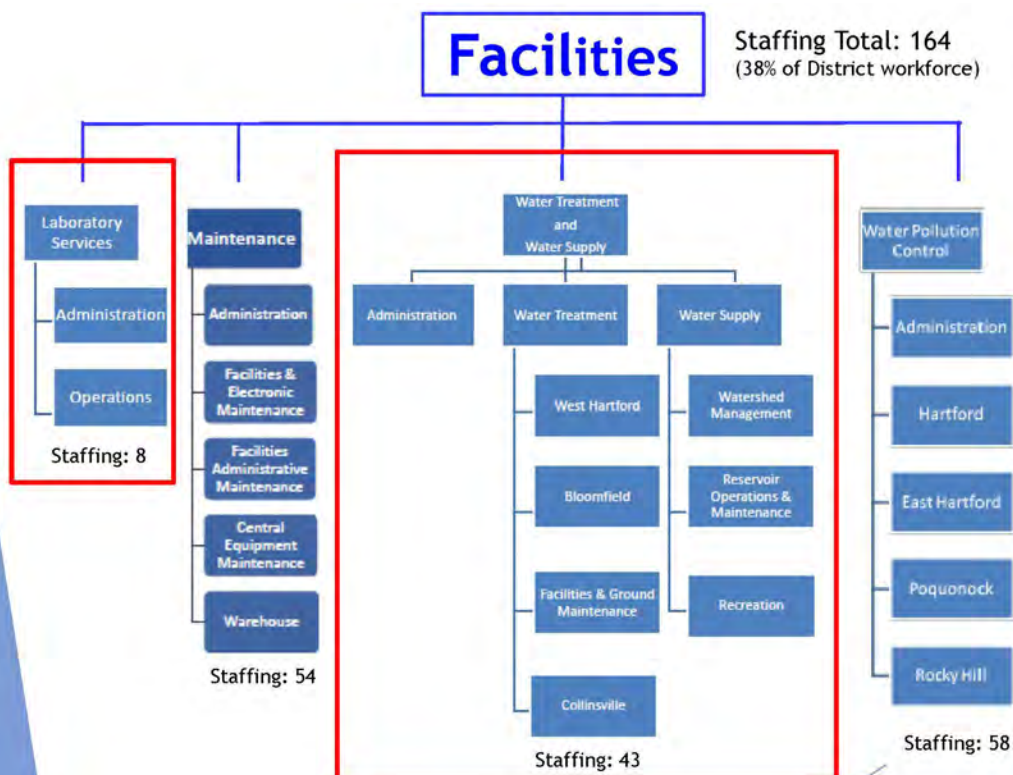
AGENDA

- 1. Water Treatment & Supply (WT&S)**
- 2. Recreation**
- 3. Laboratory**

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Facilities Role in District's Mission

- ▶ **Water Supply - watershed protection**
- ▶ **Water Treatment - makes drinking water**
- ▶ **Water Pollution Control - treats wastewater**
- ▶ **Water Quality - analysis of drinking water & wastewater**
- ▶ **Maintenance - operates pump stations; maintains all buildings, equipment and vehicles; warehouse**



3-PERFORMANCE MEASUREMENT PLAN

FACILITIES

- Budget adherence is a District wide measure that deserves significant attention. In functions where payroll is the overwhelming cost driver, cost monitoring is simplistic. In functions that have to deal with significant variables such as weather, commodities, supply chain limitations, market diversity or lack of, changing regulations, energy uncertainty, etc., make operating within budgets defined a year+ in advance of actual needs becomes a complex balancing act and mandates staff attention and flexibility.
 - In the past decade, no Facility department has required any special budget transfers to meet fiscal needs. This is a testimony to management and supervision that continually find innovative ways to maintain positive cost controls.
 - For 2023, Facilities operating budget is approximately 22% of the District operating budget

2023 Facilities Operating Budget		
Function	Budget, \$M	Budget %
Water Quality	\$ 1.6	4%
Maintenance	\$ 12.7	28%
Water Pollution Control	\$ 21.5	48%
Water Treatment & Supply	\$ 9.3	21%
Total	\$ 45.1	

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13-SUCCESSION PLAN

FULL RECOMMENDATION TEXT

- A. Develop a formal succession planning process that is consistent with labor agreements and affirmative action goals and supports the new organizational culture of rewarding and supporting merit within the workforce.
 - This process should include the CAO and COO levels and all directors and managers, and their direct reports. All employees in these levels should be included in the program.
 - The process should consider how to encourage use of flexibility provided by the upcoming job classification project. There should be an ability to transfer employees within classifications without requiring certification or posing of bid notices, and the process should be consistent with the recommended core and continuing management training and development programs.
 - The succession planning process should assure that each employee in the program is offered the types of job experiences, position rotations, and executive exchanges, and development opportunities that will prepare the employee for higher level responsibilities in the future.
 - Create a rotation program for engineers to provide a greater base of experience as well as strengthening the interface between Headquarters engineering and field engineers.
 - To identify and develop a broader field of qualified internal promotional candidates, eliminate one-on-one reporting relationships.

Facilities Post COVID Succession

- Hired 15 from outside
- Promoted 25 internally
- 2 new hires were promoted

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13-SUCCESSION PLAN

- Established a training program in lieu of the former spare program. The training program has provided training opportunities to staff that are interested in furthering their career through development of skill and knowledge. Following the program, additional staff are now qualified to perform the work and promotions within the labor union are made based on truly qualified and most senior.
- Other labor agreements have allowed Management to reorganize as needed to adapt to arising business needs which include customer requirements, regulator requirements and infrastructure needs.
- Engineers are being provided opportunities through centralized engineering across all business lines.
- Business Support Departments (Finance, Procurement, Customer Service, IT) continue to promote from within to management level positions whenever possible
- District began hiring Professional Level Trainees (PLTs) for recent college graduates for training opportunities in the organization to develop staff for future leadership roles
- The District has been successful in negotiating more flexible language into the contracts which provides more opportunity for the District to train, promote and hire qualified and experienced successors.
- In years past, Managers/Directors/Chiefs were all hired from the outside. Today they are mostly promoted from within due to the hiring of more qualified people. This creates movement for succession planning
- Hiring less people, but more qualified people.
- Multi- tasking jobs help to prepare workforce for higher level jobs

Facilities Succession

- Significant staff reduction
- Significant increase in operational, maintenance and compliance complexity
- 7 • Massive training effort including process, equipment, safety, etc.

WATER TREATMENT & SUPPLY (WT&S) - THREE MAIN AREAS

(1) Water Supply - Andy Hubbard, Natural Resources Administrator

(2) Water Treatment & (3) Recreation - Ray Baral, Assistant Manager of WT&S

WATER SUPPLY

1. Water Supply - Protect our watersheds

- **Watershed Land Management**
 - The District owns 31,000 acres of land in CT and MA. (largest landowner in CT, next to the State).
 - Forestry & Forest Management (MDC's CT/MA Licensed Foresters)
 - Wildlife Management
 - 100+ miles of service roads, bridges, and drainage systems
 - Perform water quality sampling - streams, reservoirs
- **Watershed Inspections**
 - Perform CT DPH mandated sanitary surveys.
 - Review & Monitor Land Use Proposals
- **Emergency Spill Response**



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WATER SUPPLY (CONT'D)

- **Dams and Reservoirs**
 - Approximately 40 billion gallons of water stored in two major reservoirs,
 - 9 reservoirs total
 - Operate 10 dams/dikes
 - Perform Farmington River Flow Management and river releases
 - Operate Goodwin hydroelectric facility, regulated by FERC
 - 3.4 MW capacity (two turbines, each 1.7 MW)
 - Produces approx. 13,000,000 kilowatt hours of electricity annually, enough to serve 2,000 homes.
- **Pipelines**
 - Operate 44 miles of large diameter raw water transmission pipelines, including 2 water supply tunnels and 3 flow metering facilities.



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Watershed Protection

- ▶ Protecting our water quality is a critically important task – and this begins with watershed management.
- ▶ The District's high quality drinking water begins with effectively managing 30,000 acres of watershed lands.
- ▶ District staff perform nearly 2,000 inspections per year to help ensure integrity of the watershed. This is done in collaboration with local health entities.
- ▶ In 2022, the District staff inspected **1014 watershed properties**.
- ▶ Applied a high tech solution to manual inspection and data entry of 2,000 CT Department of Public Health (DPH) mandated annual watershed inspections. Prior process was hand data entry into an antiquated computer system with no network connectivity, with paper 3-ring binder back-up. The current system allows more properties to be inspected in less time, gathering data in real time with regular electronic back-up.
- ▶ Created, implemented and continually updated a comprehensive "Watershed Forest Management Plan", for MDC's watershed properties.
- ▶ Created and implemented a successful deer herd program to mitigate the watershed damage that directly impacts water quality due to a larger deer herd than the watershed land can sustainably accommodate.

Watershed Inspection video

Watershed Protection In Action - 3.8.23 Diesel Spill RT 202

- ▶ A west bound dump truck was hit by an eastbound SUV near Stedman road on route 202 in New Hartford CT, approximately 3.4 river miles west of Nepaug Reservoir.
- ▶ 30-40 gallons of diesel fuel spilled and ran into a nearby catch basin. The catch basin drains into the Nepaug River.
- ▶ MDC Crews were on site within 20 minutes after being notified by the Command Center.
- ▶ CT DEEP on site to advise the New Hartford Fire Dept and MDC Barkhamsted spill response team how to address.
- ▶ The New Hartford FD protected the catch basin intake on the road with booms and pads and placed speedy dry on the fuel-soaked road surface.
- ▶ The MDC crew installed booms around the culvert pipe and placed oil absorbent pads in front of and inside the culvert pipe.
- ▶ The MDC crew placed oil absorbent booms across the Nepaug River in four locations downstream of the point of entry at locations recommended in the MDC 2022 Emergency Spill Response Manual. Booms were installed at Pollution Control Points 5,4,3 and above Nepaug weir.
- ▶ CT DEEP called in pollution control contractor Environmental Services Inc. to take over. MDC briefed ESI on what had been done.
- ▶ MDC Staff who participated in the spill response: Ray Baral, Frank Bachiero, Andrew Hubbard, Dan Lawrence, Pete Misani, Alphonse Jakobowski, Stanley Z and Justin Adams.



Water Supply Staff - Barkhamsted



WATER TREATMENT

2. Produce drinking water

- Operate 3 water treatment plants, 128 MGD total capacity:
 - West Hartford Filters - 85 MGD
 - Bloomfield (RES 6) - 42 MGD
 - Collinsville - 1 MGD



Collinsville WTP

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West Hartford WTP

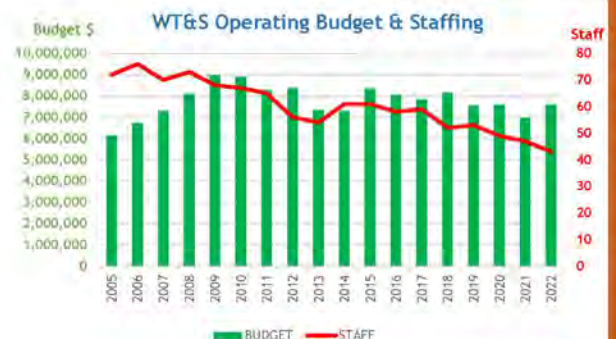


Bloomfield WTP

1-REORGANIZE DISTRICT

WATER TREATMENT & SUPPLY

- ▶ In 2006 the Water Supply and Water Treatment departments were managed as two separate entities. Due to the close ties between the two groups, the District merged them with a common leadership core. This has resulted in significantly improved communication and planning efforts.
- ▶ While the treatment plants have been increased in capacity and complexity, through automation, better training, staff development and process efficiencies, Water Treatment staffing has been reduced over the last decade from 27 in 2010 to 15 in 2022.
- ▶ Cross training is a process where by employees are challenged to learn all aspects of multiple job elements as opposed to being solely focused on one task or element. This also supports creative opportunities for staff growth and professional development, thus supporting retainment of highly skilled workers.
 - ▶ Cross Trained "Facility Maintainer 1" employees in the Filter Harrowing process at the West Hartford WTP, reducing labor cost and adding operational flexibility.
 - ▶ Cross Trained "Facility Maintainer 2" employees in Watershed Inspections and Hydroelectric Plant operation improving operational flexibility.



- WT&S Staffing reduced from 70 in 2010 to 43 in 2023
- Operating budget generally stable, increase in commodities offset by reduction in payroll

1-REORGANIZE DISTRICT, CONT.

WATER TREATMENT & SUPPLY

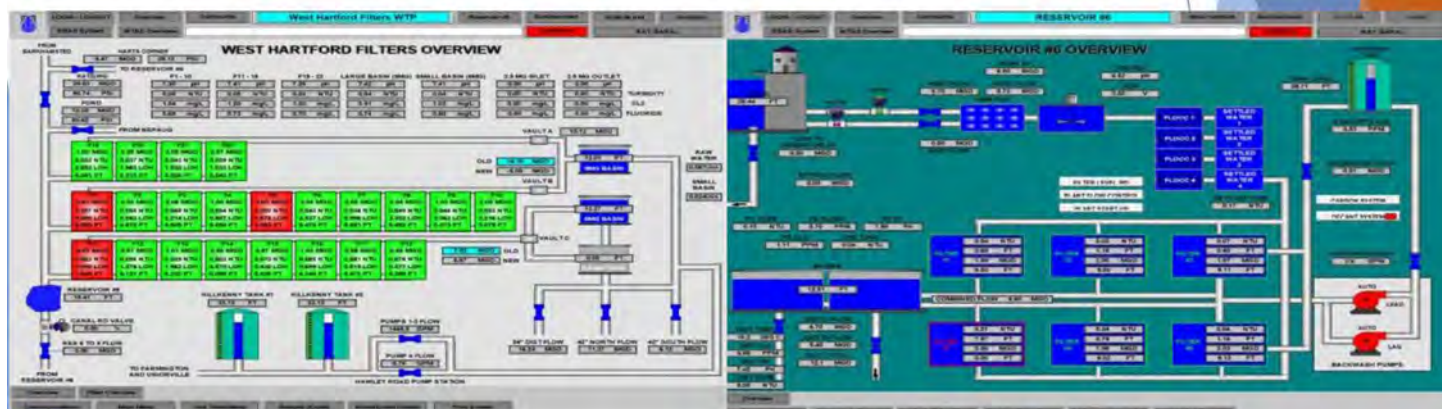
- The District is continuously looking to improve automation at all core facilities. The system is referred to as SCADA (Supervisory Control And Data Acquisition). This complex network allows for much of our equipment to be operated in an automated manner and/or be monitored remotely. This provides significant cost saving as it facilitates process optimization and minimizes costs for energy, chemicals, etc.
- Maintaining the highest level of drinking water quality is our top priority. Applying the appropriate level of SCADA can enhance and improve drinking water quality, while reducing costs through chemical optimization, minimized pumping and reduced staffing.
- The District successfully automated Reservoir 6 WTP and converted to a single shift 24/7 operation while absorbing the operation of the Collinsville WTP from the Water Supply Department into the Water Treatment Department. This combination of activities has saved the District millions of dollars in O&M and labor costs over a period of 16 years.
- Added additional layers of automation at the West Hartford WTP that led to changing a 3-shift 24/7 staffed facility to a single shift facility in 2022, eliminating two full-time shifts, providing a significant reduction in labor costs.

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12-WORKFORCE PLAN

SCADA

- ▶ The District uses a highly complex, secure control system, called SCADA, Supervisory Control and Data Acquisition.
- ▶ High level of automation, facilitates human focus on higher level thinking, versus repetitive manual manipulation of equipment.
- ▶ Powerful computer system monitors thousands of pieces of equipment, sensors and instruments, drives process optimization.
- ▶ Security, fire alarms & HVAC also included.



WT SCADA Demo

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4-INTEGRATED PLANNING PROCESS

ENERGY MANAGEMENT, CONTINUED

- Facility Specific Improvements and capitalizing on EnergizeCT grant programs. Over the past few years the District has been able to upgrade existing facilities with electrical (lighting) and mechanical (HVAC and Controls) improvements. Below are the improvements to date, the financial incentives received, annual cost savings and environmental impact.

Project	Project Cost	Incentive Amount	Incentive %	Annual kWh Savings	Annual Savings	Simple Payback (Years)
HWPCF Lighting	\$ 598,980.00	\$ 269,541.00	45%	748,309	\$ 127,212.53	2.59
Rossi Building Lighting	\$ 161,954.06	\$ 97,172.44	60%	185,664	\$ 31,562.88	2.05
Barkhamsted Lighting	\$ 49,223.52	\$ 22,150.58	45%	64,884	\$ 11,030.28	2.45
Reservoir No. 6 Lighting	\$ 128,174.39	\$ 76,904.65	60%	188,452	\$ 32,036.84	1.60
Collinsville Lighting	\$ 63,132.14	\$ 36,451.25	58%	66,275	\$ 11,266.75	2.37
West Hartford Filter Lighting	\$ 100,403.29	\$ 45,181.48	45%	129,372	\$ 21,993.24	2.51
West Branch Lighting	\$ 47,842.43	\$ 23,041.25	48%	46,856	\$ 7,965.52	3.11
Headquarters Lighting and HVAC	\$ 437,187.18	\$ 166,462.40	38%	256,096	\$ 43,536.32	6.22
CEM Lighting	\$ 88,670.00	\$ 35,294.21	40%	83,428	\$ 14,182.76	3.76
125 Maxim Road Lighting	\$ 105,316.78	\$ 31,339.93	30%	137,509	\$ 23,376.53	3.16
Totals	\$ 1,780,883.79	\$ 803,539.19	45%	1,906,845	\$ 324,163.65	3.01

Notes

Savings do not account for reduction in O&M costs to maintain lighting (>15 Year Life of each fixture)
Lighting improvements provided improved workspace lighting which contributes to a safer workplace

Reduction in Air Pollution (Over 10 Year Period)

CO2	17,648,992.36	lbs
Nox	5,764.28	lbs
SOx	6,796.96	lbs

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12-WORKFORCE PLAN

CAMERA SYSTEM

- ▶ The District operates and maintains a robust camera system - nearly 300 deployed throughout many locations.
- ▶ Easily accessible via a secure portal.
- ▶ Every major construction program at a facility has expanded camera system.
- ▶ Two primary uses of camera system:
 - ▶ Security - "eyes" on many areas at once
 - ▶ Process Control - operators can watch process areas without having to drive to, or walk to, a location just to look at something
- ▶ IT and Electrical/Instrumentation Maintenance groups collaborate on system development and implementation.
- ▶ Expansion of system will continue with new projects and evolving needs.



Facility	Number of Cameras
231 Brainard, 50 & 60 Murphy	46
Operations	45
Headquarters	36
Hartford WPCF Including TPS	72
East Hartford WPCF	13
Poquonock WPCF	2
Rocky Hill WPCF	8
Water Supply	58
Reservoir 6 WTP	7
West Hartford Filters WTP	11
TOTAL	298



Camera System Demo

RECREATION

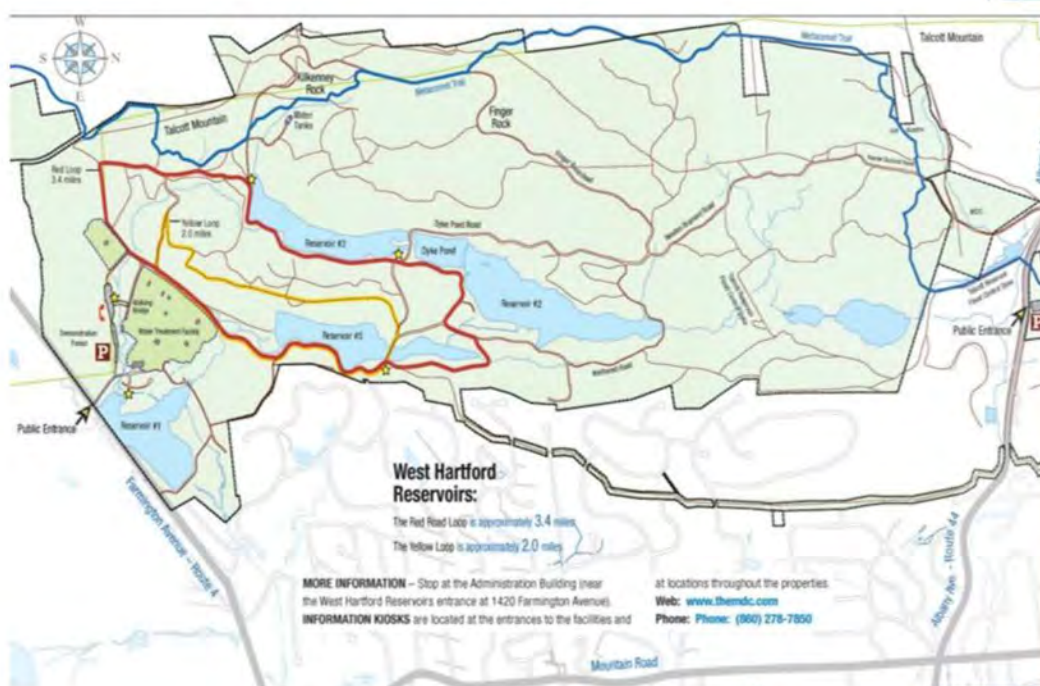
3. Recreation

- Provide passive recreation opportunities (walking, hiking, boating & fishing)
- Approximately **16,500 acres** is open to the public for various types of recreational activities.



	West Hartford & Res 6	Lake McDonough	West Branch Goodwin	West Branch-Greenwoods
Towns where located	West Hartford, Farmington, Bloomfield	Barkhamsted and New Hartford	Colebrook, Hartland, CT, Sandisfield, MA, Tolland, MA.	Barkhamsted and New Hartford
Area Open to the public	2,849 acres	1,880 acres	6,120 acres	400 acres
Permitted Activities	Walking, hiking, jogging, bicycling, dogs on leash, picnicking, cross country skiing	Walking, hiking, Swimming, boating, fishing, picnicking, hiking, hunting (limited).	Boating and fishing, ice-fishing, hunting within season, hiking.	Fishing (handicap accessible), hunting within season (bird, small game), hiking.
Miles of Trails:	41	4	10	4
Fee Charged	n/a	Boat launch fee	n/a	n/a

West Hartford Recreation



Reservoir 6 Recreation



12-WORKFORCE PLAN

LINES OF BUSINESS

- ▶ **Colebrook USACE agreement**
 - ▶ The District evaluated its long term agreement with USACE which was formed when the US government constructed the Colebrook River Lake Dam as a result of the 1955 flood. District staff identified that the potential revenue from Colebrook Hydro Operations did not justify the immediate maintenance and capital investment to the infrastructure and the ever growing O&M costs of the USACE facility that was shared by both the MDC and USACE. The District provided a formal termination letter to USACE in 2019 stating that the District was no longer required to participate in the shared maintenance agreement.
- ▶ **Riparian Agreement**
 - ▶ The District has a long-standing agreement with the Farmington River Power Co. aka Stanley Works to deliver 21.7 BG annually or make a \$250,000 payment.
- ▶ **Active to Passive Recreation**
 - ▶ The District has reduced its operating expenses while maintaining the recreational benefit of its lands for its customers in West Hartford and Reservoir No. 6 through improved facilities requiring less maintenance and better communication to customers of facilities rules and regulations. Boating recreation at Lake McDonough has also improved with the utilization of daily and season passes and purchases through online and credit card transactions; administrative costs have greatly decreased and the ability of the staff to focus on the management of the facility has improved.



Water Treatment Staff - Bloomfield (RES 6)



Water Treatment Staff - West Hartford Filters



Water Quality - Laboratory

- ▶ **Sampling and Analysis of drinking water at Bloomfield (RES 6) facility**
 - ▶ Collect minimum of 180 samples within the Distribution System to ensure compliance and quality
 - ▶ Conduct 123,000 analyses of drinking water annually to ensure compliance and quality
 - ▶ Staff of 4
- ▶ **Sampling and Analysis of wastewater at Hartford WPCF and Analysis for the three Satellite WPCs**
 - ▶ Conduct about 62,000 analyses of wastewater annually to ensure compliance and quality
 - ▶ Staff of 3

Water Quality - Reporting

- ▶ **Develop & submit drinking water reports**
 - ▶ Distribution System Monitoring Reports
 - ▶ Water Treatment Plant Monitoring Reports
 - ▶ Internal Analytical Reports (New Mains, Repairs, etc.)
 - ▶ Consumer Confidence Report (CCR)
 - ▶ Lead & Copper
 - ▶ Unregulated Contaminant Monitoring Rule (UCMR)
- ▶ **Develop & submit wastewater reports**
 - ▶ Support WPC on all monthly, quarterly and annual reporting
 - ▶ Quarterly Acute and Annual Chronic Toxicity Reports
 - ▶ Septage / Grease / Sludge Billing Data Reports

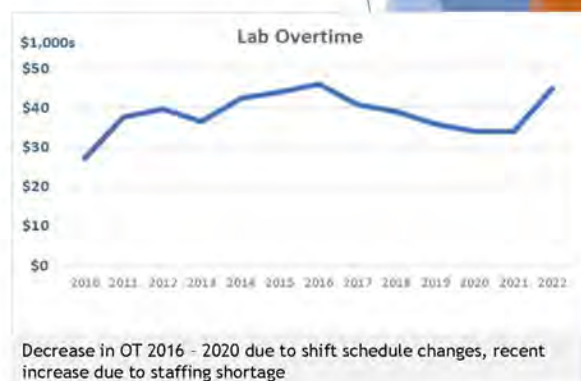


1-REORGANIZE DISTRICT

WATER QUALITY

- The District operates two laboratories. The mission is to provide quality data to water & wastewater plant operations to ensure compliance with all CT DPH and CT DEEP regulations.
- Historically the two labs were under Water Treatment and WPC, with lab administrators reporting directly to those respective managers. In 2012 the two labs were merged together to gain efficiencies in work and promote cross-training opportunities, and also to function independently of the operating groups.
- In 2022, the lab transitioned to one management position to lead both locations.
- In 2023, the District and 3713 agreed to unified laboratory technician job titles, eliminated siloed job titles, i.e. microbiologist, chemists, etc.

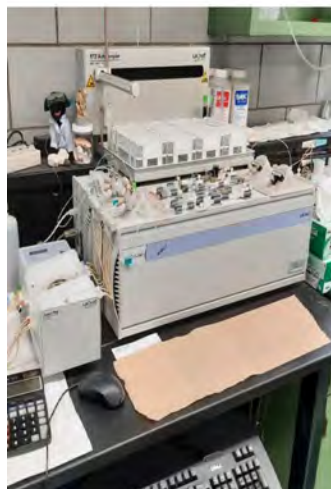
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Technology in Water Quality

- ▶ Both labs use many pieces of complex, high technology equipment and programs
 - ▶ Gas Chromatograph (GC) & Gas Chromatograph/Mass Spectrometry (GC/MS)
 - ▶ Atomic Absorption (AA) and Inductively Coupled Plasma (ICP)
 - ▶ Ion Chromatograph (IC)
 - ▶ Total Organic Carbon (TOC) Analyzer
 - ▶ Lachat Nitrogen analyzer
- ▶ Lab results go from analytical equipment directly to Labworks Laboratory Information management System (LIMS). Manually generated data also entered into LIMS.
- ▶ LIMS is then interfaced automatically with HACH Water Information Management Systems (WIMS).
- ▶ HACH WIMS is operations database, used by WT&S, WPC, EH&S and Engineering and Laboratory Services Department
 - ▶ Highly implemented to take full advantage of features
 - ▶ Received data directly from SCADA instruments, lab equipment, manual entry, etc.
 - ▶ Hundreds of reports developed for all WT&S and WPC facilities.

Lab Instruments



Flow Injection Analysis (FIA) Nitrogen Analyzer

Metals Analysis on the Inductively Coupled Plasma (ICP) Spectrophotometer



Total Organic Carbon (TOC) Analyzer

Metals Analysis on the Atomic Adsorption (AA) Spectrophotometer



Lab Instruments



Gas Chromatograph - Mass Spectrometer (GCMS) for THMs & VOCs

Gas Chromatograph - Mass Spectrometer (GCMS) for Taste & Odor Compounds



Gas Chromatograph - Electron Capture Device (GC-ECD) for HAAs



Ion Chromatograph (IC)

HACH DEMO

Hartford Lab Staff In Action



Alyse Bilodeau Weighing Filters for TSS Analysis



Kristina Gould Titrating for Volatile Acids

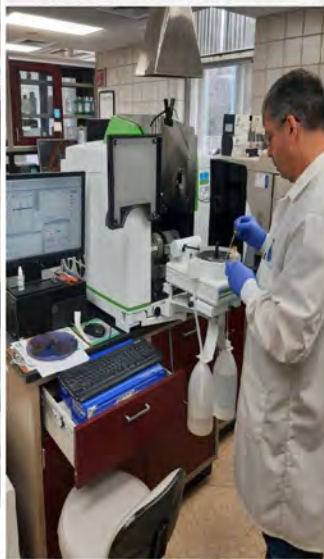
Bloomfield Lab

Julie Gillette Loading
Taste & Odor Samples on
the GCMS



Robyn Hall Completing
Coliform Analysis

Brian Gregory Loading
Samples onto the ICP



Rick Poinelli Taking
Distribution System
Samples

Water Quality Staff



Wrap-up

- ▶ Impressive infrastructure
- ▶ Tremendous technology
- ▶ Outstanding results
- ▶ NONE possible without excellent staff!

Chief Hank Martin, District Patrol Commander, presented on the MDC Patrol division.

METROPOLITAN DISTRICT COMMISSION

2003 MANAGEMENT STUDY ANALYSIS

District Patrol

March 21, 2023



1-REORGANIZE DISTRICT

PATROL 2006

- In 2006, the District had 10 patrol staff, all reporting directly to the Water Supply/Recreation Department. The main function at the time was to protect the watershed and support the function of recreation which was beginning to expand in 2002.
- Expansion of recreation as part of the recommendations had a clear impact on increasing MDC's risk and liabilities
- In 2002, upon CEO Mr. Milano's departure, his staff was assigned to Recreation. The 2003 report recommended expanding recreation as a "line of business". This is an example of the District making strategic decisions around people, which is not in the best interest of District's business model.
- 2 bicycle accidents resulting in multi-million dollar lawsuits
- More than \$650,000 allocated in the budget for overtime to support the recreation "line of business".
 - Included Patrol and Operational Staff to maintain Seasonal Facilities
- Drownings at Lake McDonough in 2000 and 2008
- By 2010, the District implemented multiple changes to the Patrol department, relying on the watershed towns and State Police to police themselves rather than depend on District Patrol to respond to non-District issues.
- Creating a passive recreation environment with consideration of revenues (only \$70K in 2003).
- Developed a new job description (EE) "Conservation Ranger" which was negotiated with the unions and approved by PP&I and the District Board in 2016. Hired 2 additional positions in 2021.
- Reassigned patrol staff to monitor the entire District rather than just the watershed
- Developed an "Active Shooter Policy" and training for all departments.
- Closed recreation activity to the public at WH Filters and Res. #6 during and after storm events to mitigate stress on District human and financial resources.



June 2019

Station	Officer	Vehicle	Equipment	Supplies	Notes
1	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
2	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
3	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
4	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
5	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
6	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
7	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
8	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
9	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
10	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
11	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
12	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
13	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
14	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
15	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
16	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
17	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
18	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
19	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
20	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
21	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
22	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
23	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
24	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
25	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
26	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
27	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
28	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
29	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	
30	Officer [Name]	2019 Ford F-150	Patrol Vehicle	Standard	

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MDC Patrol Est. 1929

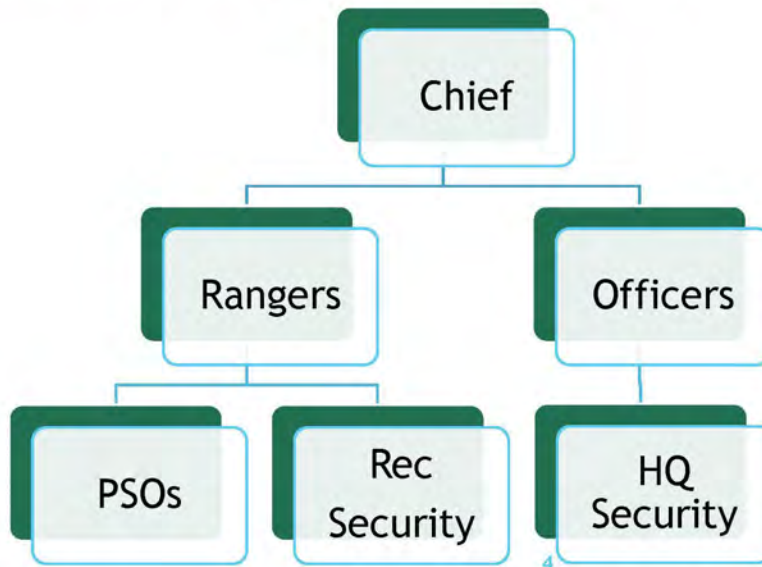


Chief Operating Officer, Christopher Levesque

is responsible for determining Patrol's
organizational structure and general oversight.

Chief Henry Martin Jr.
Ranger Sergeant James Harding
Ranger Robert Lawlor
Ranger Bradford Comer
Officer Sharon Fabrizio
Officer Shawn Hurley
Security Officers (5)
Public Safety Officer Interns (5)

MDC Police Organizational Chart



Metropolitan Police Mission

The Metropolitan District Police is committed to protecting and safeguarding MDC's infrastructures, watershed areas, employees and patrons through impartial and courteous law enforcement with integrity and professionalism. We shall ensure public safety and provide quality law enforcement service throughout the District.

HONOR - To always display integrity, honesty and truthfulness. To enforce laws equally and without bias and to hold ourselves to the highest ethical standards.

DUTY - To protect and serve the MDC, to protect the public, prevent crime and apprehend offenders. To ensure the highest quality of service to the MDC and to its community.

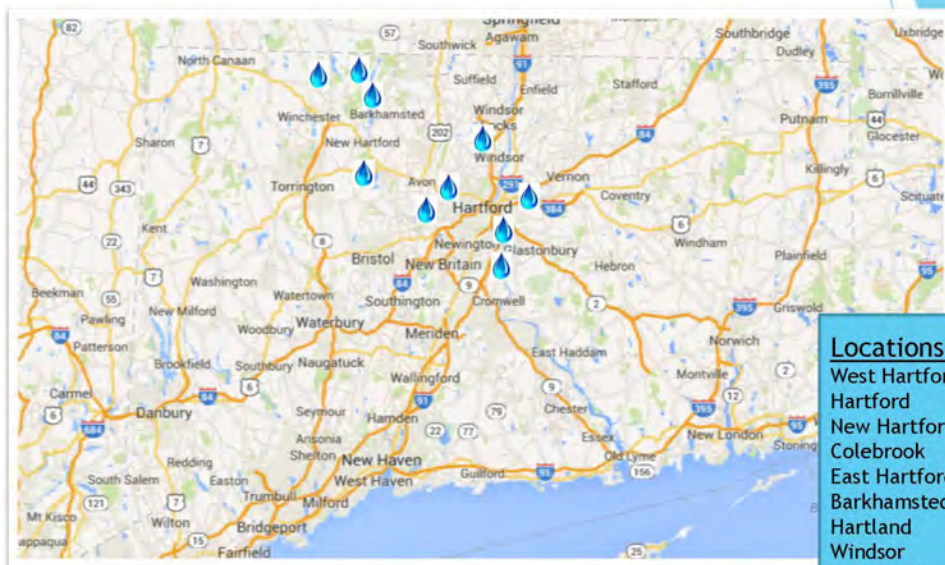
POLICE DUAL POWERS

- ▶ CT State Statute 29-19a
 - ▶ Special Police Powers
- ▶ POSTC Certified
 - ▶ Criminal, Motor Vehicle and Gaming
- ▶ Recognized as a Municipality V760
 - ▶ Sub-Municipality of West Hartford
- ▶ CT Law Enforcement Field Manual
 - ▶ Recognized law enforcement agency

Natural Resource Enforcement

- ▶ MDC enforcement ordinances specific to water supply sections - W7h through W7v
- ▶ W7h - W7v are used to enforce prohibited activities at reservoirs and within our watershed areas
- ▶ Patrol works with MDC watershed management to ensure the integrity of our watershed boundaries

MDC Law Enforcement Jurisdiction



Locations:
 West Hartford
 Hartford
 New Hartford
 Colebrook
 East Hartford
 Barkhamsted
 Hartland
 Windsor
 Rocky Hill
 Bloomfield

Past - Present

2006 Directives

- ▶ No Policies
- ▶ Few directives
- ▶ Patrol schedule
- ▶ Overtime list

Current Policies

- ▶ 140 Policies and Procedures
- ▶ SOP's
 - ▶ Lifeguards
 - ▶ Public Safety Officers
 - ▶ Rangers
 - ▶ Lake McDonough Recreation
 - ▶ Active Shooter
 - ▶ Special Events, etc.

Law Enforcement Coordination Past - Present

Coordination

- ▶ State Police

COORDINATION

- ▶ CT Chief's
- ▶ Local Police
- ▶ State Police
- ▶ FBI
- ▶ DEMHS
- ▶ Homeland Security
- ▶ DEEP
- ▶ DPH

Team Work - One Common Goal

► Assigned Duties

- Ranger Sergeant Harding- EMT, Medical Supplies, PSOs, MDTs
- Ranger Robert Lawlor- Marine, Deer Hunt, FTX and Cameras
- Ranger Robert Lawlor- Backgrounds, Grants, Active Shooter, NEXGEN, COLLECT and NCIC
- Ranger Bradford Comer- Court Liaison, Fire equipment, Property room
- Officer Hurley- Certified Firearms Trainers and Bike Patrol

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MDC Police Department Personnel Responsibilities

- Headquarters Security Operations
- Public Safety Officers - Internship (**tentacles**)
- Lifeguards, Boathouse Staff & Ticket Booth Attendants at Lake McDonough
- Ranger Positions at WH Filters & Reservoir 6



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COLLECT/NCIC

COLLECT (CT On-Line Law Enforcement Communications Teleprocessing System): COLLECT is governed by strict policies from the CT State Police and the FBI.

The National Crime Information Center (NCIC). Used to identify stolen vehicles, plates, guns, persons, wanted persons, missing persons, restraining orders etc.

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NEXGEN/MDT

Patrol vehicles are equipped with Laptops that are capable of the following:

- ▶ Provides the ability to obtain information on wants, warrants and criminal histories
- ▶ Provides MV information of registered owners, possible stolen vehicles, misuse of plates
- ▶ Provides report writing (printed wireless at HQ)
- ▶ Provides CTIC notifications of law enforcement sensitive information
- ▶ Provides instant messaging (IM) communications between law enforcement agencies
- ▶ Provides ability to monitor Districts cameras

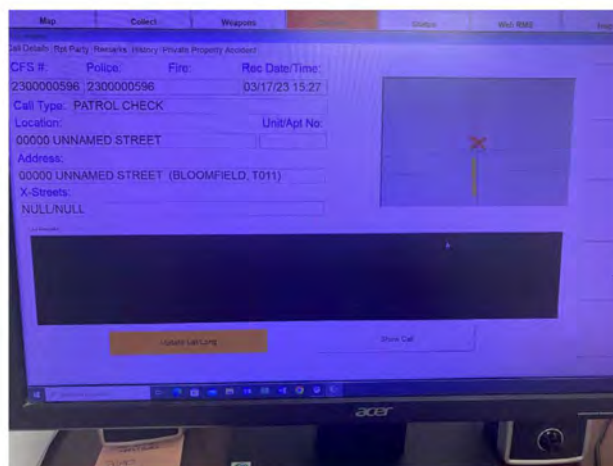
13

Body and Vehicle Cameras



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NEXGEN



PROPERTY MAPPING



MDC Security Cameras



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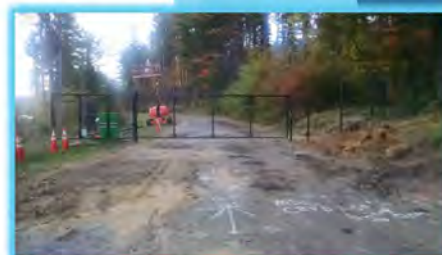
Camera & Site Security Projects

Objectives

- ▶ Critical Facility Protection
- ▶ Perimeter (Re)Establishment
- ▶ To address vehicle break-ins
- ▶ Homeland Security Directives
- ▶ Resource protection
- ▶ Utilize Federal Grants

Tasks

- ▶ Miles of underground conduit installed for power and communication wiring
- ▶ Coordination with Plant Maintenance - Control System Technicians
- ▶ Site Lighting Improvements
- ▶ Camera Siting Reviews with Engineering and Facility Operations
- ▶ Perimeter Fencing and Access Control



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Challenges and Opportunities for the Department

- ▶ Continue to enhance camera system to improve District security
- ▶ Develop a community policing program that educates citizens and is proactive to public safety
- ▶ Manage our recreational program to promote public safety
- ▶ Promote new ideas and technologies to improve services
- ▶ Increase wetland, watershed and asset protection

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Concept of Action Natural Resource Protection

- ▶ **Marked Police Vehicles**
- ▶ **Police All Terrain Vehicles:** Patrol Officers certified operators
- ▶ **Police Mountain bikes:** Patrol Officer certified and trained operators
- ▶ **Joint Operations:** State of Connecticut ENCON DEEP Police, Granville, Massachusetts Police Department collaborate to address MDC ATV violations in Connecticut, and Massachusetts
- Proactive patrol activity to prevent illegal dumping
- Rapid response to notifications of spills or possible contamination incidents
- Activation of spill response notification procedures



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Dam Facilities

Mandatory dam patrol checks

- ▶ **Focus:** security of the dams/facilities, suspicious activities, physical checks of gate houses, and hydroelectric facilities
- ▶ **Action:** High visibility, uniformed officers, marked police vehicles, bike patrols and foot patrols. Routine security intelligence update reports from water ISAC, CTIC, and department of Homeland Security in regards water infrastructures and dams



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Water Delivery System Patrols

- ▶ Mandatory daily physical patrol checks
- ▶ Barkhamsted Reservoir, Reservoir 6, Filters and Lake McDonough
- ▶ Patrol checks also include - raw water pump stations, above ground water tanks, hatch vault locations, distribution vault hatches, stand pipes, and security checks of single points of failure
- ▶ Patrol checks also include facility perimeters
- ▶ Patrol Officers conduct security assessments of water delivery systems and facilities



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Delivery System Security/Breach

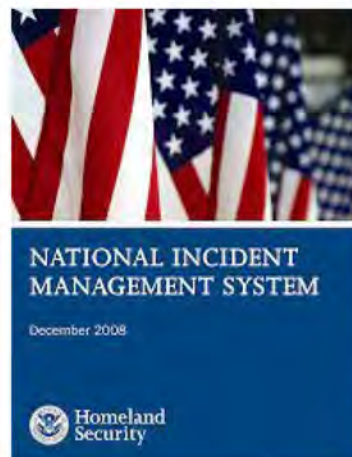
- ▶ Security incident reports are completed by patrol officers to EPA standards to help organize information of security incidents which may relate to the threat of water contamination
- ▶ The forms are intended to summarize information about a security breach that may be relevant to the threat evaluation process
- ▶ Patrol use the form to consolidate details to turn over to a MDC Facility Manager

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Incident Command System

Patrol Officers who are the first responders on the scene will begin the ICS by performing 7 critical tasks:

- ▶ Establish communication and control
- ▶ Identify threat zone
- ▶ Establish inner-perimeter
- ▶ Establish outer perimeter
- ▶ Establish command post
- ▶ Establish staging Area
- ▶ Request additional resources



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Facility and Building Access Control

- ▶ In 2019, Patrol with the Operations and Facility Departments begin standardizing the issuing of building and facility access.
- ▶ Improvements were focused on around roles based access and managing access by employee job title.
- ▶ Approach included issuing new ID badges, terminating all old badges and performing routine audits of any exceptions
- ▶ Currently the badge issuing to new and promoted employees is central managed and issuing of new access requirements is coordinated with the HR and employee onboarding.



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Improvement of Boathouse and Police Facilities



Business Support Functions

- ▶ Headquarters - security, hearings
- ▶ IT - computers, body cameras, COLLECT
- ▶ HR - hearings, terminations
- ▶ Customer service - complaints and threats
- ▶ Finance - purchases
- ▶ Hydro - coordinate safety measures
- ▶ Survey Department - identify intrusions
- ▶ Utility Service - direct traffic
- ▶ Water Pollution - CT Water sampling

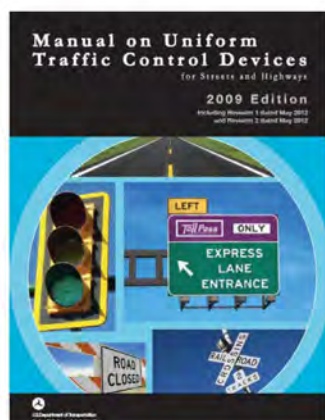
Active Shooter Training

- ▶ Patrol performed assessments for all buildings/facilities at the District to review evacuation routes. Work was coordinated with EH&S to update Fire Evacuation Routes and Post at each facility.
- ▶ District Patrol Officer met with each facility and conducted active shooter training. Training session was also coordinated with EH&S and HR to discuss specifics of site safety as well as provide information on the District's Employee Assistance Program.
- ▶ Active Shooter Training class was conducted in Online Percipio Training

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Recreation Site Safety

- ▶ Reviewed signage plans for all District Recreation Facilities
- ▶ Executed required improvements to bring facility to MUTCD standards



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Winter

Metropolitan District Patrol



- **Hunting** (Nepaug Controlled Hunt) & Small Game (Greenwoods, West Branch)
- **Poaching/Illegal Hunting & Fishing**
- **Ice Fishing/Fishing** (Colebrook Res, Hogsback/Goodwin), Alcohol Possession
- **Snowmobile/ATV Enforcement/4x4 Off Road**
- **Traffic Enforcement/Accident Reduction**
- **Trespassing/Intrusion/Homeland Security/Resource Protection**
- **MDC Ordinances/Res #6, Filters** (i.e. Helmets, Dog Off leash)
- **Security Assessments**
- **Assist and work with other agencies** (DEEP Bear Study)



Spring

Metropolitan District Patrol



- **Illegal Dumping**
- **ATV/Off Road**
- **Fishing Enforcement**
- **Illegal Camping/Camp Fires**
- **Boating Enforcement** (Alcohol, License/Safety Check, Aquatic Plant Inspection)
- **Spring Turkey Enforcement**
- **Recreation Area Opens/Lake McDonough**
- **Mountain Bike Patrol**



Summer

Metropolitan District Patrol



- Recreation Area/Illegal Swimming/Alcohol
- Boat Patrol/Boating Enforcement
- Fishing Enforcement
- Mountain Bike Patrol
- Marijuana Cultivation
- ATV/Off Road



Fall

Metropolitan District Patrol



- MDC Deer Management Controlled Hunt
- Hunting Enforcement
- Fishing Enforcement
- Mountain Bike Patrol
- ATV/Off Road/Mud Bogging/Colebrook Res
- Illegal Dumping

Natural Resource Environmental Protection

- ▶ Wildlife Management Project
- ▶ MDC Police personnel conducts background checks and pre-hunt meetings
- ▶ MDC Police work with CT ENCON DEEP conservation officers in strict enforcement of all rules and regulations at Nepaug reservoir's 1,400 acres of watershed forestland



The Issue & Objective

- The deer population at MDC's Nepaug Reservoir is preventing tree seedlings & other native plants from growing.
- In 2006, a CT DEEP survey showed 95% of the seedlings sampled were heavily browsed by deer.
- Prevent the growth of tree seedlings
- Destroy native plant communities
- Eliminate the forest understory which holds the soil
- Increase the risk of soil erosion & runoff, causing water quality degradation
- Reduce biodiversity and affects long-term forest health

Deer Exclosure:

A small fenced area was built in 2006 to keep deer out & demonstrate their impact on the forest.

Outside the fence - bare earth



Inside the fence trees & shrubs grow vigorously

2008 photo

MDC and National Guard Civil Support Team W.M.D. Unit Training Exercise

The mission of Weapons of Mass Destruction Civil Support Teams (WMD-CST) is to support local and state authorities at domestic incident sites by identifying agents and substances, assessing current and projected consequences, advising on response measures, and assisting with requests for additional support.



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MDC Employee Ride-Along

- ▶ The purpose of implementing a ride-along is to give MDC staff a working knowledge of the areas that they will be monitoring on the surveillance system, and a better understanding of the vast area patrolled by MDC Police. Improvements were made and we are positioned to monitor, investigate, and address homeland security issues.



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PSO Internship Program

PSO Training



PSOs at Substation



Thank You!

QUESTIONS?

Commissioner Mandyck exited the meeting at 6:07 PM

Commissioner Bush exited the meeting at 6:15 PM

OPPORTUNITY FOR GENERAL PUBLIC COMMENTS

No one from the public appeared to be heard.

ADJOURNMENT

The meeting was adjourned at 6:28 PM

ATTEST:

John S. Mirtle, Esq.
District Clerk

Date of Approval